

Record of Decision for the Electrical Interconnection of the Windy Point Wind Energy Project November 2006

INTRODUCTION

The Bonneville Power Administration (BPA) has decided to offer contract terms for interconnection of 250 megawatts (MW) of power to be generated by the proposed Windy Point Wind Energy Project (Wind Project) into the Federal Columbia River Transmission System (FCRTS). Windy Point Partners, LLC (WPP) propose to construct and operate the proposed Wind Project and has requested interconnection to the FCRTS.¹ The Wind Project will be interconnected at BPA's Rock Creek Substation, which is under construction in Klickitat County, Washington. The Rock Creek Substation will provide transmission access for the Wind Project to BPA's Wautoma-John Day No.1 500-kilovolt (kV) transmission line.

BPA's decision to offer terms to interconnect the Wind Project is consistent with BPA's Business Plan Final Environmental Impact Statement (BP EIS) (DOE/EIS-0183, June 1995), and the Business Plan Record of Decision (BP ROD, August 15, 1995). This decision thus is tiered to the BP ROD.

BACKGROUND

BPA is a federal agency that owns and operates the majority of the high-voltage electric transmission system in the Pacific Northwest. This system is known as the FCRTS. BPA has adopted an Open Access Transmission Tariff (tariff) for the FCRTS, consistent with the Federal Energy Regulatory Commission's (FERC) *pro forma* open access tariff.² Under BPA's tariff, BPA offers transmission interconnection to the FCRTS to all eligible customers on a first-come, first-served basis, with this offer subject to an environmental review under the National Environmental Policy Act (NEPA).

¹ WPP has requested interconnection of 250 MW from BPA under OASIS request G0208. If WPP should seek interconnection of additional megawatts, it would be through a new request under the Open Access Transmission Tariff. BPA would review any such request under NEPA and prepare any necessary NEPA documentation before making a decision regarding the request.

² Although BPA is generally not subject to FERC's jurisdiction, BPA follows the open access tariff as a matter of national policy. This course of action demonstrates BPA's commitment to non-discriminatory access to its transmission system and ensures that BPA will receive reciprocal and non-discriminatory access to the transmission systems of utilities that are subject to FERC's jurisdiction.

For all requests for interconnection of generating facilities that exceed 20 MW, BPA also acts consistently with FERC's Order No. 2003, Standardization of Large Generator Interconnection Agreement and Procedures, and Order 661, Interconnection for Wind Energy, as adopted by BPA and incorporated, with FERC approval, into BPA's tariff. Orders No. 2003 and 661 provide a uniform process and agreement for offering interconnection to wind generating facilities exceeding 20 MW. In its Order 2003 compliance filing, BPA included provisions in its Large Generator Interconnection Procedures (LGIP) that reflect BPA's obligation to complete an environmental review under NEPA of a proposed large generation interconnection before deciding whether to offer a final Large Generator Interconnection Agreement (LGIA) to the party requesting interconnection.

WPP is the party requesting interconnection. Consistent with its tariff, including the LGIP, BPA must respond to this interconnection request and comply with its NEPA responsibilities.

RELATIONSHIP TO BUSINESS PLAN EIS

In response to a need for a sound policy to guide its business direction under changing market conditions, BPA explored six alternative plans of action in its BP EIS. The six alternatives were: Status Quo (No Action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. The BP EIS examined each of these six alternatives as they relate to meeting the regional electric energy need in the dynamic West Coast energy market. The analysis focused on the relationships among BPA, the utility market, and the affected environment and evaluated transmission as well as generation, comparing BPA actions and those of other energy suppliers in the region in meeting that need (BP EIS, Section 1.7).

In the BP ROD, the BPA Administrator selected the Market-Driven Alternative. Although the Status Quo and the BPA Influence Alternatives were the environmentally preferred alternatives, the differences among alternatives in total environmental impacts were relatively small. Other business aspects, including loads and rates, showed greater variation among the alternatives. BPA's ability to meet its public and financial responsibilities would be weakened under the environmentally preferred alternatives. The Market-Driven Alternative strikes a balance between marketing and environmental concerns, including those for transmission-related actions. It is also designed to help BPA ensure the financial strength necessary to maintain a high level of support for public service benefits, such as energy conservation and fish and wildlife mitigation and recovery activities.

The BP EIS was intended to support a number of decisions (BP EIS, Section 1.4.2), including contract terms BPA will offer for transmission interconnection services. The BP EIS and BP ROD documented a strategy for making these subsequent decisions (BP EIS, Figure 1.4-1 and BP ROD, Figure 3, page 15).

BPA's decision to offer terms for interconnecting the Wind Project is one of these subsequent decisions and the subject of this ROD. BPA reviewed the BP EIS to ensure that offering contract terms for interconnecting the Wind Project was adequately covered within its scope and that it was appropriate to issue a record of decision tiered to the BP ROD. This ROD for the Wind Project, which summarizes and incorporates information from the BP EIS, demonstrates this decision is within the scope of the BP EIS and BP ROD.

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This ROD describes the specific project and environmental information applicable to this decision to offer contract terms for transmission interconnection of the Wind Project at BPA's Rock Creek Substation, with reference to appropriate sections of the BP EIS and BP ROD. This ROD references information that was incorporated by reference into the BP EIS from BPA's Resource Programs (RP) EIS (DOE/EIS-0162, February 1993). The RP EIS contains an analysis of environmental effects and mitigation for wind projects and associated transmission. This ROD also references information in BPA's ROD for the Goodnoe Hills and White Creek Wind Energy Projects, in which the environmental impacts of the Rock Creek Substation were analyzed (see *Record of Decision for the Electrical Interconnection of the Goodnoe Hills and White Creek Wind Energy Projects*, November 2005).

Lastly, this ROD summarizes and references Wind Project information from the following sources:

- Klickitat County Energy Overlay (EOZ) Final Environmental Impact Statement. Klickitat County, September 2004.
- Windy Point Project EOZ Facility Application, Windy Point Partners, LLC, February 2006.

The EOZ Facility Application includes the following:

- Expanded State Environmental Policy Act (SEPA) Checklist. Windy Point Partners, LLC, February 2006.
- Windy Point Wind Farm Klickitat County, Washington, Environmental Report, February 2006.
- Adoption Notice and SEPA Addendum for the Windy Point Wind Farm. Klickitat County, April 4, 2006
- Findings of Fact, Conclusions and Decisions of the Klickitat County Planning Director, Windy Point Wind Energy Project, April 24, 2006.
- Settlement Agreement Regarding Windy Point Wind Energy Projects, November 3, 2006.

PROJECT DESCRIPTION

The following description of the proposed Wind Project is a condensed version of the project description found in the EOZ application, including the Windy Point Wind Farm Environmental Report prepared by Ecology and Environment, Inc. under contract to WPP.

Windy Point Wind Energy Project

The proposed Wind Project would be constructed in south-central Klickitat County, Washington between 6 to 15 miles southeast of Goldendale, Washington, north and northwest of the

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community of Goodnoe Hills. The project would be east of Highway 97 and south of Hoctor Road, and would be constructed on and next to a high ridgeline overlooking the Columbia River.

The proposed project area spans about 14,893 acres of private and state-owned property.

Up to 97 wind turbines would be installed under the proposed Wind Project. Each of these turbines would have a rated capacity of 2.5 MW. The project would produce up to 250 MW of electricity.

More specifically, the Wind Project would consist of the following facilities:

- Up to 97 Clipper Liberty Class II (Liberty Turbines) (2.5 MW) wind turbine generators erected on tubular steel towers; total extension would be about 415 feet above the ground. Some of the turbines may be equipped with longer rotor blades that would extend the height of those turbines by an additional 5 feet. The turbines would be spaced at least 400 feet apart and actual spacing would vary depending on the wind resource. Turbines would be grouped in strings or linear groups of 2 to 29 turbines, would operate at rotation speeds ranging from 9.7 to 15.5 rpms (revolutions per minute), and would be sited to take advantage of the predominately westerly winds. At each turbine location, an area of about 4,800 square feet would be used temporarily for assembling turbine and tower components prior to installation. A pad to support a construction crane is included in this area. Overall, the construction of crane pads and tower foundations would impact about 10.7 acres.
- Individual step-up transformers to increase the voltage of electricity generated by each turbine from 690 volts to 34.5 kV. The transformers would be next to the tower base on a concrete pad and would stand about 6 feet tall. The reinforced concrete pad would be about 8 feet by 8 feet by 12 inches thick.
- A 34.5-kV electrical collector system to collect energy at 34.5 kV from each wind turbine using underground cabling, and to deliver the energy to a new substation.
- Two new substations, which would further increase the voltage of electricity from 34.5 kV to 230 kV. Substation 1 would be next to Hoctor Road, about 13 miles from the intersection of Hoctor Road with Highway 97. Substation 2 would be near Turbine String J. The substation sites would be graveled, fenced areas with transformers, breakers, and associated equipment, including a small control house. Transformers would not use polychlorinated biphenyl (PCB) oil. Each substation would occupy an area of about 2.7 acres.
- A new, 9-mile long single-circuit, 230-kV wood-pole, H-Frame transmission line. This new line would be built from the proposed substation 2 to substation 1 (a distance of about 8 miles), and then another mile east to BPA's Rock Creek Substation. The preferred route would cross Hoctor Road from substation 2 to substation 1 and then parallel Hoctor Road on the north side (75 feet from the road) into Rock Creek Substation. The transmission line structures would be about 80 feet tall.

- An operations and maintenance (O&M) facility site within the project area. A permanent O&M building (about 3,000 square feet) would be constructed for O&M functions. The O&M building would include office and workshop areas, a kitchen, bathroom, shower, and utility sink. There would also be a maintenance yard with equipment sheds for vehicles and spare parts. The facility site and maintenance yard would be sited on about 30 acres next to Hocter Road, about 14 miles from the intersection of Hocter Road with Highway 97. A well would be drilled on-site to provide water for domestic needs and a septic system would be installed for sanitary wastewater. Electricity would be provided by Klickitat PUD, and telephone service by the local telephone utility. When the project is operational, there would be about 15 permanent full-time employees on the O&M staff.
- A buried cable communication system including a fiber optic or copper communication line between the wind turbines and substations, and the O&M facility. This communication system would allow individual wind turbines, turbine strings, and other project facilities to be monitored and controlled both onsite and from remote locations.
- Two permanent meteorological towers placed on the western edge of the project area. The meteorological towers would collect meteorological data. The steel towers would stand about 165 feet tall and would be supported by guy wires.
- Access to the project area from the north via Hocter Road and from the east via Chamberlain-Goodnoe Road. Hocter Road is a two-lane paved road maintained by Klickitat County with access from Highway 97, about 3 miles from Goldendale. Access to Chamberlain-Goodnoe Road is from Goodnoe Station Road.
- Improve about 15.5 miles of existing public/private roads and construct about 6.5 miles of new roads. During construction, primary access roads would be 35-foot-wide gravel roads to allow sufficient space for construction equipment. Road entrances would be wider to accommodate the 125-foot turning radius of construction cranes and other flat bed truck deliveries with turbine equipment.
- One construction staging area next to Hocter Road about 14 miles from its intersection with Highway 97. Two other sites have been identified for transmission line construction staging areas. These sites would also serve as parking areas for construction trailers and equipment. All turbine components would be delivered directly to the turbine locations for on-site assembly. If additional staging areas are needed, these would be placed near roads and on lands previously disturbed by heavy grazing, agriculture, or other similar uses and coordinated with the county as required. The staging areas would be about 5.7 acres. After construction, these areas would be restored to their previous use.

Construction of the proposed project would begin in summer 2006 and be completed by December 2007. During construction, about 80 to 100 workers would be employed.

The Wind Project would deliver electric power to the regional transmission grid at BPA's Rock Creek Substation, located about 6 miles southeast of Goldendale, Washington. The Rock Creek

Substation is adjacent to and beneath BPA's Wautoma-John Day No.1 500-kV transmission line, and will provide transmission access to this line.

WPP plans to operate the project for at least 30 years. Upon termination of the project, WPP would remove, at its sole cost and expense, all wind turbines, step-up transformers, substations, support structures, switching/interconnection facilities, control rooms/O&M building, and meteorological masts. Footings and foundations would be removed to a level of 3 feet below the surface of the ground, if required by the landowner. WPP would repair any damage from removal, restore the property to grade, and implement erosion and control devices and procedures.

PUBLIC PROCESS AND CONSIDERATION OF COMMENTS

Consistent with BPA's strategy for tiering appropriate subsequent decisions to the BP ROD, a public process for the Wind Project itself and integration of the Wind Project into the BPA Rock Creek Substation was conducted.

Klickitat County permitting and SEPA reviews of the Wind Project provided opportunities for public comment. These opportunities included the following:

- On March 2, 2006, WPP gave notice by mail to adjacent property owners of the proposed project of a March 16, 2006 community meeting to provide information about the proposed Wind Project.
- On March 2, 2006 and for a period of one week, WPP gave notice in the Goldendale Sentinel newspaper announcing the March 16, 2006 community meeting.
- On March 2, 2006, Klickitat County gave notice on its website of the March 16, 2006 community meeting.
- On March 14, 2006, Klickitat County gave notice on its website and sent e-mail notices to individuals on its e-mail list that the County had deemed WPP's application for the Wind Project complete.
- On March 16, 2006, WPP held a community meeting on the proposed project.
- On March 20, 2006, Klickitat County sent WPP's complete application and a memorandum inviting comment to landowners and other interested parties.

BPA also provided the following opportunities for public involvement on the interconnection of the Windy Point project to the Rock Creek Substation:

- On March 3, 2006, BPA sent written notice to adjacent property owners and interested parties describing the interconnection of the Windy Point project into the FCRTS at Rock Creek Substation. The notice requested comments on the proposal by April 3, 2006. This information was also posted on the Internet at <http://www.transmission.bpa.gov/PlanProj/Wind/> and in BPA's monthly information periodical, the "BPA Journal." No comments were received during the open comment period.

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- On March 16, 2006, BPA attended the community meeting held by WPP in Goldendale, Washington to receive comments and address questions.

At the March 16, 2006 community meeting, meeting participants made comments about the following issues:

- Potential noise and vibration impacts to residential zoned properties at the west end of the project.
- Impacts to raptors, especially about the timing of raptor nest survey and why one has not been completed.
- Mitigation if raptor nests are found in the vicinity of the project.
- The overall accuracy of predicted impacts on birds.
- Location of ridgeline turbines to minimize impacts on birds.
- Lighting on the wind turbines, including number of turbines with lights, placement of lights, and motion-activated lighting at the base of turbine tower.

No comments were received at this meeting by BPA on the substation or the integration of the Windy Point Project at BPA's Rock Creek Substation, although BPA answered questions about the substation.

Klickitat County also received comment letters concerning the Wind Project from the following agencies, organizations, and individuals:

- The Washington Department of Fish and Wildlife (WDFW) submitted comments that mainly focused on the public process and need for the preparation of an environmental impact statement to discuss cumulative impacts. WDFW also included a list of mitigation measures needed to protect wildlife resources. WPP submitted a letter to Klickitat County responding to WDFW's letter and met with WDFW representatives on two occasions to further address WDFW concerns.
- Klickitat County Public Works requested a condition requiring a road use agreement for Hoorcor Road and the county's public right-of-way. This condition has been imposed in the permit.
- A group of landowners in the Columbia Hills Estates submitted comments on noise, aesthetics, lighting, vandalism, wildlife habitat, and zoning clarification. These landowners also submitted mitigation measures for the developer and county to consider. WPP submitted letters to the county responding to the landowner letters.
- The Department of Ecology submitted requirements for rock sources and concrete. WPP has been informed of permit requirements.
- Klickitat County received three letters on April 24, the same day the county issued the EOZ permit. Commenters (including the Blue Mountain Audubon Society) expressed concerns about the adequacy of the environmental studies done for the project, the potential impacts to people, birds, bats and other animals, and requested that the county not approve the project. Because these letters were received late in the process, they were not specifically addressed in the permit decision. Some of the issues raised in the

letters were similar to others raised during the comment period. Other issues included wind energy siting policies that are addressed by the county's EOZ FEIS and ordinance.

On April 4, 2006, Klickitat County issued an Adoption Notice and SEPA Addendum for the Windy Point Wind Farm. On April 24, 2006, Klickitat County issued a Findings of Fact, Conclusions and Decision granting the EOZ permit. Among other things, these Findings addressed and responded to the comment letters received concerning the Wind Project, as described above.

In late April 2006, a group of individuals and the Audubon Society filed an administrative appeal with the County of the County's SEPA determination. The group of individuals also filed an administrative appeal with the County of the County's EOZ Permit in early May 2006.

A County hearing examiner was appointed and an appeals hearing was held on July 19 and 20, 2006. On July 31, 2006, the Hearing Examiner issued a final order that denied all appeals and affirmed both the SEPA and EOZ permit decisions.

On August 23, 2006, some of the individuals who had brought the administrative appeal filed an appeal of the County's SEPA and EOZ permit decisions, as well as the Hearing Officer's July 31, 2006 final order, to the Washington State Superior Court in Klickitat County. After a period of negotiation between WPP and the appellants, settlement was reached by these parties that resulted in the withdrawal of the appeal. An appeal settlement agreement was signed by the parties on November 3 and 8, 2006. Under the terms of the settlement agreement, WPP has agreed to provide funding to a habitat conservation set-aside program to be set up with an institutional nonprofit organization.

ENVIRONMENTAL ANALYSIS

Consistent with the BP ROD, the BP EIS was reviewed to determine whether offering terms to interconnect the Wind Project is adequately covered within its scope. The BP EIS alternatives analyzed a range of marketing actions and response strategies to maintain a market-driven approach. The BP EIS showed that environmental impacts are determined by the responses to BPA's marketing actions, rather than by the actions themselves. These market responses include resource development, resource operation, transmission development and operation, and consumer behavior.

BPA's BP EIS described generating resource types, their generic environmental effects on a per-average-MW (per-aMW) basis, and potential mitigation. The discussion of generic environmental impacts of renewable energy resource development, including wind, is provided in Section 4.3.1 of the BP EIS. The RP EIS also described the environmental effects and potential mitigation associated with the construction or upgrade of transmission facilities to integrate the resources with the existing transmission system (Section 3.5). The per-aMW impacts for wind projects (RP EIS, Table 3-19) were incorporated and updated in the BP EIS (Table 4.3-1). The BP EIS contains an analysis of generic environmental impacts, including resource development and operation (Section 4.3.1) and transmission development and operation (Section 4.3.2).

The Market-Driven Alternative anticipated unbundling of products and services, constructing transmission facilities for requests for non-federal power transmission, and providing

transmission access to wholesale power producers (Section 2.2.3). The BP EIS also noted that, under the Market-Driven Alternative, new transmission requests would depend more on customer requests than on new resource development by BPA (Section 4.2.3.3). Finally, the BP EIS identified the associated need to enhance transmission facilities (Section 4.2.3.2) as one consequence of all resource development. One example would be customer requests for new transmission line and substation facilities for interconnection of generation resources.

In light of the analyses contained in the BP EIS and RP EIS, interconnection of the Wind Project falls within the scope of the BP EIS. Site-specific impacts that would result from the Wind Project are of the type and magnitude reported in the BP EIS and the RP EIS. Although BPA's actions in interconnecting the Wind Project at the under-construction Rock Creek Substation would have no direct environmental effects, the following discussion describes the environmental impacts that would result from the Wind Project, and provides additional information on potential cumulative impacts.

Wind Project Environmental Impacts

The following summary of environmental impacts is based on information in the SEPA Checklist and the Environmental Report for the Wind Project. Mitigation requirements identified in the Environmental Report were subsequently incorporated into the EOZ permit for the Wind Project. Ninety-four non-discretionary mitigation conditions were approved as part of the EOZ permit for the Windy Point project.

Land Use and Recreation

The proposed project would cover about 14,893 acres on the Columbia Hills in Klickitat County, Washington, east of Highway 97 and south of Hoorcor Road. Current land use within this area includes wheat farming, cattle and sheep grazing. The nearest rural residence is about 2,200 feet from a proposed wind turbine.

Klickitat County zoning regulations designate land within the project area as Extensive Agriculture (EA). The land is also entirely within the county-designated Energy Overlay Zone (EOZ) for wind and solar energy. Wind generation facilities are an allowed use within the EOZ.

The Wind Project would be constructed on land leased under long-term agreements from about eight landowners, and the Washington Department of Natural Resources.

All existing land uses would continue to occur in and around the turbines and other facilities during construction and operations. Wind lease payments to farmers would provide a supplementary source of income that would help farmers retain their farms when farm prices or weather reduce other sources of farm income.

About 154 acres would be removed from production for the wind turbines and associated facilities.

The proposed project is on private lands and there are no designated recreational facilities or activities on the project site. Informal recreation opportunities include horseback riding, hunting,

berry picking, and hiking. The proposed project would not displace any of these existing informal recreation opportunities.

Transportation

Access to the project site would be on private roads that connect to Klickitat County's Hoor Road and Chamberlain-Goodnoe Road. The project could require some improvements to Chamberlain-Goodnoe Road. About 15.5 miles of existing public/private roads will be improved for construction access and 6.5 miles of new private roads will be constructed.

Although construction would temporarily increase traffic on roads in and around the project parcels, coordinating construction schedules and equipment access with landowners in the project area would minimize impacts on agricultural activities. Once the project is constructed, operations would involve a negligible increase in vehicle traffic for project operations staff—about 15 round trips on Hoor Road daily. On an as-needed basis, maintenance vehicles would travel to and from the turbines on the project site; most of this vehicle traffic would be on private roads.

Geology and Soils

The project site extends along the southern ridge of the Columbia Hills. Steep slopes exist along the ridgelines southern flank on the western edge of the project, and a more gently sloping bench on the ridgelines southern flank on the eastern edge of the project. Most of the projects turbines would be located north of the ridgeline on land that slopes gently to the north (slopes vary from 0 percent to greater than 5 percent, in some cases 15 percent). Elevations range from about 1,600 feet to 3,100 feet.

The project site is located in a semi-arid region of Klickitat County. Soil types are generally silt loams with some cobbly silt loam and rock outcrops. Silt loam soils in the area are prone to wind and water erosion. While there were no surface indications or history of unstable soils identified, potential for erosion is greatest during late fall-winter rains and spring snowmelt. The potential for wind erosion would be greatest from mid-summer through fall when the area is driest.

Construction activities would include grading for access roads, turbines, staging areas, substations, a transmission line, and trenching for communication and transmission lines. The completed project is expected to have a little over 4 acres of impervious surface.

The project will use or upgrade existing roads where possible and minimize new roads. All roads will have gravel surfaces. A water truck will wet these surfaces to control dust and wind erosion at the site. All exposed soil surfaces that are not being actively used during construction will be protected by biodegradable erosion-control mats or weed-free straw. Properly engineered roads, turbine foundations, drainage systems, and the use of Best Management Practices (BMPs) and compliance with Washington Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit conditions is expected to minimize erosion during construction.

Vegetation

The project area contains grazed and ungrazed shrub-steppe and native plant communities such as pine-oak woodlands, sagebrush-steppe, saltbush-greasewood, and wheatgrass and bluegrass habitat. There are also isolated juniper trees, riparian areas, and crop and rangeland. Cheatgrass, bluegrass species, fescue species, crested wheatgrass, and intermediate wheatgrass are common grass species. Other dominant plants include yarrow, lupine and arrowleaf balsamroot. Primary habitats within the project area include shrub-steppe and Oregon white oak woodlands.

No sensitive plant species were found during a field survey of the project area.

Construction activities would temporarily impact about 312 acres and permanently impact about 154 acres. After construction all disturbed areas, except the areas needed for permanent facilities, would be restored with native grasses and shrubs or cropland or rangeland. The permanent facilities include project roads, turbine foundations and transformers, the O&M facility, substations and the transmission line. The transmission line would remove about 3.5 acres of white oak (in a conservation area), but to the degree possible, the oak trees would be trimmed rather than removed. About 257 acres would be set aside to mitigate for impacts to impacted plant habitats (see the Fish and Wildlife Section for more detail on compensatory mitigation).

Wetlands and Water Resources

There are neither perennial streams nor natural ponds in the project area, but some local small springs have been developed into stock-watering ponds or altered to flow into stock-water troughs.

The project could cross 11 small intermittent drainages, some with existing culverts. Some culverts may be replaced. No facilities will be built in drainage areas, except for some road upgrades on existing roads.

The project is not within a 100-year floodplain. No wetlands would be impacted by the project.

Groundwater is found in porous zones in underlying basalt. Water from existing wells would be used for dust suppression.

Construction could increase storm runoff and expose soils to erosion. WPP will follow a Stormwater Pollution Prevention Plan to reduce impacts.

Fish and Wildlife, including Avian Species

All drainages in the project area are intermittent, containing little or no water most of the year. As such, there are no fish living in drainages crossed by existing roads that will be used for the project. New roads may cross drainages designated as critical fish habitat by the Washington Department of Natural Resources. Precise impacts to these areas will be unknown until final road design is complete. Final access road design would be approved by the county prior to construction.

The road crossings of drainages (with potential critical fish habitat) would use existing crossings or would avoid impacts by rerouting the road. In some cases the existing road may have to be widened or the crossing improved by spanning the drainage feature with a culvert. Roads would be widened only the minimal width needed to accommodate construction equipment. Final road design would determine the precise extent of the actual impact on the drainage and its buffer, if any. The boundaries of the construction zone would be clearly marked and if construction is occurring near, but not in a drainage feature, a 25-foot buffer zone would be established. If appropriate or required by Klickitat County, crossings of drainage features would be restored to preconstruction conditions.

Wildlife that may be found in the area include black-tailed deer, badgers, coyotes, red fox, porcupines, pocket gophers, ground squirrels, rabbits, voles, and mice and other small animals. The northeastern portion of the area is within an area classified as mule and black-tailed deer winter range and mule deer have been observed during field surveys. Most construction will take place during the summer months, minimizing construction disturbance to wintering big game. Any disturbance to these populations would be temporary.

Common birds found in the project area include American robin, barn swallow, black-billed magpie, California quail, common nighthawk, crow, red-tailed hawk, Swainson's hawk and other birds. Three active red-tailed hawk nests, two Swainson's hawk nests, one great horned owl nest, and two American crow nests were found in the random survey blocks within 2 miles of the project area. The area is not known to be on the migration route or corridor of any mammals or butterflies. Some migrating song birds and other passerines may pass through the area, but the area is not a part of a major flyway for birds.

Total avian mortality at Windy Point would range from 214 to 689 per year. Most of the fatalities of diurnal raptors will likely consist of buteos (especially red-tailed hawk) and American kestrels. Although some of the mortality may be comprised of waterfowl, waterbirds and upland game birds, as is the case at other wind farms, most of the avian mortality would likely be composed of song birds. The largest number of fatalities will likely be horned larks, a common grassland songbird detected during the surveys. Average mortality rate for bats might range from 190 to 451 per year.

The project would impact 3.5 acres of priority habitat (white oak) where the transmission line would cross an unnamed tributary to Rock Creek, 262.5 acres of grassland and shrub-steppe/grassland habitat, and about 66.5 acres of shrub-steppe habitat. Total wildlife habitat impacted would be about 332.5 acres. The project would emphasize protecting potential habitat conservation areas by avoiding, minimizing, and mitigating impacts. Construction of the preferred 230-kV transmission line route through the oak/oak-pine forest would be limited to the narrowest section of the forest and, to the degree possible; the trees would not be removed, but would be trimmed to avoid interference with the transmission line. WPP has developed a Fish and Wildlife Habitat Management Plan with elements required by the county.

Compensatory mitigation is proposed to protect habitat off-site similar to that which would be impacted. The compensatory habitat protection program would meet relevant Washington Department of Fish and Wildlife's (WDFW) Wind Power Guidelines for habitat mitigation by, for example, protecting 2 acres of shrub-steppe or other high-value habitat for every 1 acre of

impacted shrub steppe, and replacing or restoring shrub-steppe that is temporarily disturbed by construction according to the Wind Power Guidelines' provisions.

In addition, WPP will make payments into a, as yet, undesignated conservation fund to further mitigate for potential wildlife and avian impacts. The Fund will be held and managed by an independent institutional third-party, nonprofit organization with conservation and stewardship of habitat as its primary mission. WPP's payments will be used to preserve terrestrial and aerial avian wildlife habitat in or around the Columbia Hills area in Klickitat County, the express priority for which will be the protection of habitat that is threatened by development.

Other mitigation includes the following: limiting driving on or near important plants and trees, limiting construction periods during critical times for sensitive species, buffer zones, erosion and sedimentation control structures, preservation of critically important plants and trees in habitats of local importance (such as WDFW priority habitat), re-contouring to approximate preconstruction conditions and reseedling with approved native plant seeds. A revegetation monitoring and noxious weed management plan would be implemented to evaluate and correct, if necessary, the success of restoration.

Threatened and Endangered Species and Species of Concern

The bald eagle, which is listed as threatened under the Endangered Species Act, has been observed in the project area. Bald eagles were observed during surveys in 2003 including one juvenile bald eagle flying over Hector Road, three individuals observed feeding on a cow carcass in the Goodnoe Hills area, and five observations of single bald eagles.

Based on research from other wind plants, the overall risk to bald eagles is expected to be low, though some bald eagles may collide with the turbines.

No other federally-listed threatened or endangered animal species are expected to be impacted. Other species of concern observed or known to occur in the area that may be impacted by the project include the golden eagle, Ferruginous hawk, Lewis' woodpecker, peregrine falcon, sandhill crane, Western gray squirrel, and various species of moths, butterflies, wasps, amphibians and reptiles.

Project features have been or would be designed to protect or minimize impacts to habitat and species that are sensitive or of local importance. For example, turbines have been sited away from the edge of the ridgeline to reduce avian impacts and away from oak/oak-pine forest, a WDFW priority habitat. To the degree possible, existing rather than new roads would be used to access the site, minimizing impacts on drainage features. In some cases, existing roads cross through drainages, but roads may be rerouted to avoid or minimize crossing impacts or the crossing would be upgraded by providing long-term protection to the drainage feature. The substations and construction staging areas have been selected to minimize impacts to habitats of local importance. For example Substation 2 has two alternative sites, both selected to avoid impacts to oak/oak-pine forests, but a final site would be selected that minimizes impacts to other environmental and habitat factors. Timing and duration of the construction period are intended to minimize construction activities during seasons when species are sensitive to disturbance.

There are no federally-listed plants in the project area.

Historic/Archeological Resources

Cultural resources were discovered during a survey of the project area. Resources would be avoided during construction and operation if possible. If impacts cannot be avoided, treatment plans would be developed to minimize and mitigate the adverse effects to these resources.

An “unanticipated Discovery Plan” will be prepared to guide response in the event previously unidentified cultural resource properties are encountered during construction. If a cultural resource is discovered during construction, the construction activity will cease in the vicinity of the site pending implementation of the unanticipated Discovery Plan.

Visual Resources

The project area is characterized by rolling terraces, agricultural fields, and rangeland above the Columbia River. The hills range in elevation from about 1,600 to 3,100 feet. Vegetation in the area is dominated by shrub steppe, grasslands, oak and oak/pine woodlands, juniper woodlands, and limited riparian habitat. Scenic areas within the county include the Columbia River Gorge National Scenic Area and State designated scenic byways. The Columbia River Gorge National Scenic Area is about 9 miles west of the area. The project is outside the National Scenic Area boundary. There are three scenic roadways that occur within a 5-mile radius of the project. Two of these scenic roadways are within Washington; U.S. Highway 97 and State Route 14. The third scenic roadway within the project radius is Interstate 84 (I-84) in Oregon on the south side of the Columbia River.

The project would be seen both by travelers and local residences from many locations along Hooron Road, and Interstate Highway I-84. Travelers on Highway 97 may also see glimpses of the wind turbines. Because of the distance from major highways, the wind turbines would not block or obstruct views, but they would alter the visual landscape.

The wind turbines have been sited to take maximum advantage of the wind resource while avoiding or minimizing impacts, taking into account potential aesthetic impacts. In addition to the wind turbines and transmission lines, access roads can also impact visual resources. To the degree feasible, access to the project site would use existing roads, and new roads would follow contour lines along ridges to minimize visual impacts. After construction, all roads not required for facility maintenance and other disturbed areas will be reseeded.

The transmission facilities will use non-reflective conductors and non-luminous insulators.

Non-reflective paint for towers and blades will reduce glare. Towers would be painted a neutral color that will blend easily with the neutral colors of the existing landscape.

The O&M facility will be constructed of materials compatible with existing buildings in the area and to the degree possible, the storage of maintenance and other materials will be within buildings. Substations 1 and 2 and the O&M facility will use drought tolerant plantings around the perimeter of the facilities to minimize visual impacts. To minimize facility lighting from being visible offsite, lights would be shielded and directed downward along the perimeter of Substation 1 and the O&M building. Substation 2 will be equipped with manual lights for nighttime work; otherwise lighting will be limited to motion detector sensor lights.

Noise

Temporary construction noise would occur from building access roads, wind turbines, substations, interconnecting transmission line, and the O&M building.

Permanent noise would occur from operation of the wind turbines themselves; the turbine blades passing through the air and the gear box and generator located in the nacelle. Noise from the blade is reduced with an aerodynamic blade and materials that provide a smooth finish on the blades. To mitigate noise from the gear box and generator, these components are totally enclosed and insulated in the nacelle. Noise would be generated on an intermittent basis depending on wind velocity and duration. Noise modeling conducted for turbines with similar noise-generating capabilities indicated that the sound level at the nearest residence (about 2,200 feet from the nearest proposed turbine) would be about 40 to 45 dBA and would meet state noise regulations (60 dBA daytime and 50 dBA nighttime).

Overall, wind turbines are typically quiet, but the noise generated by wind turbines is likely to be the most noticeable at low wind speeds (8 to 12 mph). Wind turbine noise tends to be masked by other background sources (i.e., the sound generated by the wind) at higher wind speeds.

Public Health and Safety

Fire risk from construction activities include dry vegetation coming in contact with an ignition source, such as catalytic converters on vehicle exhaust systems, smoking by construction personnel, use of explosives, electrical arcing, and use of welding equipment. There is a small risk of accidental fire or explosion during operation and maintenance as a result of careless smoking practices, catalytic converters coming in contact with dry plant material, or a turbine mechanical failure. The site could also be impacted by range fires that originate off site or from lightning. Most of the electrical connection system will be buried, minimizing the potential for fire. However, the 230-kV overhead transmission line could, in unusual circumstances, cause a fire from a broken electrical cable or sagging of the line into vegetation during periods of very hot weather. The appropriate maintenance of vegetation within the transmission line corridor and line voltage regulation would minimize this potential impact.

Fuel and lubricating oils from construction vehicles and equipment are potential sources of hazardous material that could accidentally leak or spill during construction, operation and maintenance. Potential spills or leaks could occur during refueling or equipment maintenance, but could also occur from equipment failure or an accident. Some turbine components also include lubricating oils and coolants that could be released if a component containing these materials was damaged during construction. Mineral oil used in turbine transformers and at the substations could also be accidentally released by damage caused during transport or installation.

To minimize the potential for releases of hazardous materials, refueling and maintenance of equipment would be performed in the construction staging and fabrication yard. Emergency repairs required in the field would be closely supervised and oil-absorbent pads would be placed under the repair area. Turbine and substation components would be carefully moved to the site and installed. Fuels such as gasoline and diesel along with lubricants would be stored in a secure

and bermed area in the construction staging and fabrication yard. The substation transformers have a specifically designed containment system to contain the contents of the transformer in the event of an accidental release of the mineral oil.

Ice can build up on either stationary or moving turbine blades during ice storms or other subfreezing conditions. However, the presence of ice build-up while stationary actually inhibits the ability of the blade to turn because it has lost most of its aerodynamic properties. As the blade begins turning it may shed some of the ice close to the turbine, but in most cases it would not obtain operating speeds until the ice was shed from the blades. As ice builds up on a moving blade or is shed from a blade reaching operational speeds, there is a potential for ice fragments to be thrown from the blades.³

Electromagnetic fields (EMF) are produced when electricity flows through a conducting material or is used by an electrical device or appliance. In particular, magnetic fields are the result of electrons moving through a conductor or electrical device and electric fields are a result of the force (voltage) that drives the electrical current. EMF would be associated with the turbines, turbine transformers, the underground collection system, the substations, and the overhead 230-kV transmission lines. Although there have been numerous studies on the potential health effects from EMF, the studies remain inconclusive showing no or weak associations with effects on health.⁴

Socioeconomics and Public Services

The project would not increase the need for public services. There would be no significant increase in permanent population as a result of construction and operation of the project. During construction most workers would be from the local area (80 to 100 workers over the course of construction). Operation will not require a large number of people (about 15 permanent full-time employees). The project would not result in a significant increased need for public services, including fire and police protection. The number of people expected to need temporary lodging or permanent housing would be small enough that adequate housing, and other lodging, would be available. The project would have a net economic benefit to the landowners participating in the project because wind lease payments to landowners would provide a supplementary source of income that would help farmers retain their farms when farm prices reduce other sources of farm income. A substantial increase in the Klickitat County tax base would provide benefits to all county residents. Indirect economic benefits would accrue to businesses in the area from construction workers purchasing goods and services.

³ Energy Facility Siting Council, December 2003. Kittitas Valley Wind Power Project, Draft Environmental Impact Statement.

⁴ Minnesota Department of Health, [undated]. Electric and Magnetic Fields, Frequently Asked Questions, Web site: <http://www.health.state.mn.us/divs/eh/radiation/emf/#risks>, accessed December 5, 2005.

National Institute of Health Sciences and the National Institute of Health. June 2002. EMF Electric and Magnetic Fields Associated with the Use of Electric Power. Web site: <http://www.doh.wa.gov/ehp/rp/xray/emf202.pdf>, assessed December 5, 2005.

Air Quality

Air quality in the area is generally good, with the only pollutant found in significant levels being particulate matter, primarily from windblown dust. It is likely that most other pollutants are well below U.S. Environmental Protection Agency (EPA) ambient air quality standards.

Impacts on air quality would primarily be emissions from combustion engines and windblown dust from clearing and grading activities and construction vehicles. No emissions would be generated by the completed project.

During construction, idling of trucks and other heavy equipment, such as concrete delivery trucks, will be minimized to the extent possible. Traffic speeds on unpaved roads will be limited to 25 miles per hour to minimize dust generation. A water truck will be maintained on-site during construction for dust suppression. Disturbed areas that are not permanently occupied by project features will be revegetated. A minimum of 6 inches of gravel surface would be laid on new roads to reduce wind erosion.

Cumulative Impacts

The BP EIS and RP EIS provide an analysis of potential cumulative impacts resulting from development of generation resources and transmission facilities in the region. Additionally, the Klickitat County Energy Overlay Zone Final EIS discusses potential cumulative impacts of wind energy development throughout the county. As stated in the FEIS, a total of 500 turbines would be built west of Rock Creek and 167 turbines would be built east of Rock Creek (based on the land area and wind availability, and using 1.5-MW turbines). The Klickitat County FEIS analyzed impacts based on the development of four wind power projects with a total generating capacity of 1,000 MW. In addition, a cumulative impact analysis was recently prepared as part of a SEPA process for the White Creek Wind Energy Project, which is another wind project in the immediate vicinity of the Windy Point Wind Project.⁵ The cumulative impact analysis for the White Creek project included the Windy Point Wind Project (known at that time as the “Cannon Power” wind project). The following cumulative analysis is based on information from these sources.

Four wind projects in the vicinity of the Windy Point project have received Conditional Use Permits (CUP). Windtricity Ventures, LLC and Northwest Regional Power, LLC has received a CUP for the 150 MW “Goodnoe Hills” project, which is immediately east of the Windy Point Project. White Creek Project, LLC has received a CUP for the 200 MW “White Creek” project, which is northeast of Windy Point. The Wind Turbine Company has received a CUP for a 15 MW project at the Roosevelt Landfill, about 8.5 miles south and east of the White Creek project. PPM Energy has a CUP for a potential 250 MW project (Big Horn) immediately north of the White Creek project. Windtricity Ventures, LLC has submitted an application to Klickitat County for an EOZ permit for the Hctor Ridge Wind Farm. This facility would generate up to 60 MW. Two other potential projects (PPM project for an additional 150 MW and Windy Point

⁵ Last Mile Electric Cooperative, August 2005. White Creek Wind Energy Project Expanded SEPA Checklist.

project for an additional 250 MW) have been discussed at various times in different forums, but have not been formally proposed or submitted to the county for a permit.

Land Use and Recreation

Overall, wind projects and associated facilities, including substations, have relatively little direct impact on land use because the footprint of the facilities is small even if they occur across large areas. Additionally, wind projects tend to reinforce the existing agricultural land uses (the primary land uses in most areas proposed for wind energy). Wind projects are compatible with all types of agriculture, which can occur around most wind project facilities. Wind lease payments provide a supplemental source of income for farmers, helping them weather the uncertainties of agricultural yields and prices.

State and local land use regulations in Klickitat County (whether under the CUP process, or the new EOZ permit process) would require county land use approval prior to construction of additional facilities. This permitting process and related SEPA regulations are designed to prevent incompatible uses and the degradation of farmland. The potential for cumulative impacts would be substantially minimized by these regulations.

Wind projects and associated facilities would have little direct impact to recreation in agricultural areas. Dispersed hunting that may occur in the area could continue after construction and during turbine operation. Some vandalism of facilities may occur.

Geology and Soils and Flood Hazards

Construction of energy projects close together could increase the flooding and erosion potential in flood-prone areas as a result of the decrease in soil storage area. Additional wind projects and associated facilities needed in the future could increase the potential for erosion, but standard control and containment measures would limit permanent impact.

Vegetation and Wildlife

Additional projects in the area combined with the acreages already planned for development would increase the total acreage in the county used for wind development. The permanent footprint (during operations) of wind projects is small compared to the total project acreage. The area taken up by each turbine and associated facilities, including roads and substations, would be changed and could no longer be in habitat. The acreage not used for facilities would remain unchanged. No land use changes and subsequent potential habitat changes would occur. Some projects, such as Goodnoe Hills and Windy Point, will set aside acreage to mitigate impacts to wildlife habitat.

Throughout the U.S, at projects where studies have been conducted and can be compared, the average number of all bird (all species combined, native and non-native) avian collision fatalities per turbine is 2.3 per year. The average for the Pacific Northwest is 1.9 bird fatalities per turbine per year. Because of the wide variety of types of turbines in operation and proposed, the future effects of wind development on birds and bats is difficult to predict. The range in total bird mortality predicted for the development of 300 turbines for the Big Horn and White Creek projects combined would be approximately 570 to 690 birds per year and would be composed primarily of passerines. The addition of the Goodnoe Hills, Windy Point and PPM projects

would likely increase these numbers. The avian species most likely to be found as a fatality is horned lark, a common grassland and fallow-ground species found throughout the project area year-round. For all species, annual fatalities may be up to about 1,000. Similar fatalities may occur at other projects.

Bat mortality for the Big Horn and White Creek projects combined may be about 765 with a range from 360 to 1,125 (using individual regional wind project ranges from 0.8 to 2.5 bats per megawatt per year). The addition of the Goodnoe Hills, Windy Point and PPM projects would likely increase these numbers. Fatalities may contain a high percentage of hoary and silver-haired bats. These species are not state-sensitive status and do not have federal protection.

These additional cumulative mortalities in the Pacific Northwest region are relatively insignificant compared to the total bird and bat populations anticipated to be present in the general area at various times of the year.

Bluebirds are a species of community concern, the western bluebird is a state Monitor species, and there has been an extensive effort to enhance bluebird populations in the Bickleton and Roosevelt area. A review of flight height data collected during pre-construction studies at nine other wind resource areas in the Pacific Northwest indicates that bluebirds very rarely fly at turbine rotor-swept heights. Collisions would likely be rare and wind projects would not have negative impacts on bluebird populations in the area.

Mitigation and monitoring opportunities such as habitat restoration and fatality monitoring studies proposed for wind projects will reduce impacts to local birds and bats and their habitat. The cumulative impacts are not anticipated to have a significant effect on bird or bat populations.

Wetlands and Water Resources

Wetland, water quality, and water use impacts related to new wind generation projects would be temporary and minor, and subject to further regulatory approvals. Wind projects can be located to avoid these resources.

Historic and Cultural Resources

Cumulative effects on cultural resources are associated with construction activities and permanent land use change through development of new wind generation projects. Because the developments are likely to be dispersed throughout the county, the impacts are not likely to be concentrated, so loss of cultural artifacts from an entire cultural source is unlikely. Wind projects can be located to avoid these resources.

Visual Resources

Additional turbine installation would increase the number of areas from which turbines would be visible. Because future wind energy development would likely occur in rural areas of the county, visual impacts of wind energy would be experienced by the relatively few residents of the rural areas. Turbines would also be visible to other county residents and people traveling through the county on public roads near the wind project areas. The significance of the visual changes would vary according to the location of the wind project and the perceptions of the

viewers (some viewers find that wind energy projects add a positive element to the visual environment, while others feel the opposite).

Noise

Significant noise issues associated with wind generation projects are limited to the construction period of the project. If wind projects were constructed at the same time, a minor increase in construction noise would occur. No operational impacts are anticipated other than the sound of the blades when the turbines are operating and intermittent noise associated with substation operations.

Public Health and Safety

Any potential risks to the health and safety of workers or the general public associated with the construction, operation, and maintenance of the project would be incidental and comparable to other construction projects.

Socioeconomics and Housing

Wind lease payments to farmers would provide a supplementary source of income that would help farmers retain their farms when farm prices or weather reduce other sources of farm income.

Additional development would provide tax revenue to local governments.

New wind generation projects would create temporary effects on housing. Because these effects would be temporary and may occur during separate time periods, accumulation of impacts related to project construction would be minor.

Public Services and Utilities

Cumulative impacts on public services and utilities would be largely dependent on facility siting. Emergency services would have a higher demand with the additional facilities to cover. However, this additional demand could be offset by additional tax revenue.

Air Quality

Air quality issues associated with wind energy are limited to construction emissions, which could be minimized by the use of reasonable controls on all projects.

Transportation

If two or more wind projects are built at the same time in an area where the construction traffic uses the same road network, the construction-related traffic would have a cumulative effect. These effects would be temporary. To minimize them during construction, the projects involved could investigate coordinating delivery schedules and routes, use of shared resources to minimize trips, and coordinating construction schedules to address any temporary constraints on traffic flow that develop. The County Public Works Department could work with both projects to ensure shared responsibility for any road improvements or repair.

MITIGATION

Specific resource mitigation conditions to avoid or minimize environmental harm from the Wind Project were identified through the Klickitat County EOZ permit process and the appeal process and are present in the mandatory EOZ permit conditions and the appeal settlement agreement which are incorporated here by reference.

PUBLIC AVAILABILITY

This ROD will be available to all interested parties and affected persons and agencies. It is being sent to all stakeholders who requested a copy. Copies of the BP EIS, BP ROD, the Goodnoe Hills and White Creek Wind Energy Projects ROD, and additional copies of this Windy Point Wind Energy Project ROD are available from BPA's Public Information Center, P.O. Box 3621, Portland, Oregon, 97208-3621. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520, or by accessing BPA's Web site: www.efw.bpa.gov.

CONCLUSION

BPA has decided to offer contract terms through a Large Generation Interconnection Agreement for interconnection of the Windy Point Wind Energy Project into the FCRTS at the Rock Creek Substation in Klickitat County, Washington. The LGIA provides for interconnection of the Wind Project with the FCRTS, the operation of the Windy Point Project in the BPA Control Area (including control area services such as generation imbalance service), and the maintenance of reliability of the FCRTS and interconnected systems. As described above, BPA has considered both the economic and environmental consequences of taking action to integrate power from the Wind Project into the FCRTS. This decision is:

- within the scope of environmental consequences examined in the BP EIS;
- in accordance with BPA's Open Access Transmission Tariff and associated LGIP; and
- in accordance with BPA's statutory authority to make available to all utilities any capacity in this system determined in excess to that required by the United States (16 U.S.C. 838d).

BPA will take measures to ensure the continuing safe, reliable operation of the FCRTS. This ROD identifies all practicable means to avoid or minimize environmental harm that might be caused by the integration of the Wind Project into the FCRTS.

***Record of Decision for the Electrical Interconnection of the
Windy Point Wind Energy Project***

BPA contracts providing for integration of power from the Wind Project into the FCRTS at BPA's Rock Creek Substation will include terms requiring that all pending permits be approved before the contract is implemented. BPA contracts will also include appropriate provisions for remediation of oil or other hazardous substances associated with construction and operation of related electrical facilities in a manner consistent with applicable federal, state, and local laws.

Issued in Portland, Oregon.

/s/ Stephen J. Wright
Stephen J. Wright
Administrator and
Chief Executive Officer

November 29, 2006
Date